

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A process for measuring bar-shaped articles of the tobacco processing industry, comprising:

conveying the bar-shaped articles of the tobacco processing industry in a lengthwise axial manner in a conveyor line; and

optically measuring at least one physical property a length and a diameter of the bar-shaped articles.

2. (Canceled).

3. (Original) The process in accordance with claim 1, wherein the bar-shaped articles comprise filter bars.

Claims 4 - 8. (Canceled).

9. (Currently amended) The process in accordance with claim 1, wherein the at least one physical property comprises at least two physical properties, and the at least two physical properties length and the diameter are measured several times.

10. (Currently amended) The process in accordance with claim 9, wherein the at least two physical properties length and diameter are measured simultaneously.

11. (Original) The process in accordance with claim 1, further comprising pneumatically measuring the at least one physical property.

12. (Currently amended) The process in accordance with claim 1, further comprising, after measuring the at least one physical property length and the diameter, determining whether the at least one measured physical property lies within a measured length and diameter lie within predetermined measurement range ranges.

13. (Currently amended) The process in accordance with claim 4 12, wherein, when at least one of the measured physical property lies length and diameter lie outside of the predetermined measurement range, the process further comprises removing the bar-shaped article from at least one of the conveyor line and the manufacturing process.

14. (Original) The process in accordance with claim 1, further comprising triggering a start signal, wherein the measurement of the physical property occurs after the start signal is triggered.

15. (Original) The process in accordance with claim 14, wherein the start signal is triggered by a light barrier.

16. (Currently amended) The process in accordance with claim 1, wherein the ~~at least one physical property is~~ length and the diameter are measured in the end area of the bar-shaped articles.

17. (Currently amended) The process in accordance with claim 1, wherein two measuring points are arranged along a conveying zone of the bar-shaped articles, and the measuring is performed by the two measuring points along the conveying zone of the articles.

18. (Original) The process in accordance with claim 17, wherein the two measuring points are arranged to measure the length of the bar-shaped articles.

19. (Original) The process in accordance with claim 17, further comprising impinging light upon at least one of the bar-shaped articles and the two measuring points.

20. (Original) The process in accordance with claim 19, wherein at least one light source is positioned to impinge light upon the at least one of the bar-shaped articles and the two measuring points.

21. (Original) The process in accordance with claim 20, wherein the at least one light source comprises a laser light source.

22. (Currently amended) The process in accordance with claim 20, wherein the measurement of ~~at least one physical property~~ the length and the diameter is based on an area of the article impinged upon by the light source and based on a brightness profile produced.

23. (Original) The process in accordance with claim 22, wherein the brightness profile is detected by a sensor.

24. (Original) The process in accordance with claim 23, wherein the sensor comprises a line sensor.

25. (Currently amended) A device for conveying bar-shaped articles of the tobacco processing industry to a magazine comprising:

a conveyor line structured and arranged to convey the bar-shaped articles of the tobacco processing industry in a lengthwise axial manner; and

an optical measuring device structured and arranged to measure at least one physical property a length and a diameter of the filter bars bar-shaped articles.

26. (Original) The device in accordance with claim 25, wherein the bar-shaped articles comprises filter bars and the magazine comprises a filter magazine.

27. (Currently amended) The device in accordance with claim 26, further comprising a device that ~~conveys the filter bars in a lengthwise axial manner and feeds the filter bars to the filter magazine in a crosswise axial manner.~~

28. (Canceled).

29. (Currently amended) The device in accordance with claim 25, further comprising:

~~a conveyor line arranged to convey the bar-shaped articles; and~~

wherein said measuring device being is arranged along said conveyor line.

30. (Original) The device in accordance with claim 25, further comprising a braking device and an accelerating device for the bar-shaped articles; and

 said measuring device being located between said braking device and said accelerating device.

31. (Original) The device in accordance with claim 30, wherein said braking device comprises a pair of braking rollers, and said accelerating device comprises a pair of accelerating rollers.

32. (Original) The device in accordance with claim 25, further comprising:

 a crosswise conveying unit for the bar-shaped articles; and

 said measuring device being located on said crosswise conveying device.

33. (Original) The device in accordance with claim 32, wherein said crosswise conveying device comprises a drum.

34. (Original) The device in accordance with claim 25, wherein said measuring device comprises at least one light source and at least one sensor.

35. (Original) The device in accordance with claim 34, wherein said at least one light source comprises a laser light source and said at least one sensor comprises a line sensor.

36. (Currently amended) The device in accordance with claim 25, wherein the measuring device is structured and arranged to measure a the length and a the diameter of the bar-shaped articles at a same time.

37. (Original) The device in accordance with claim 25, wherein the measuring device comprises one of at least one mirror and a mirror arrangement.

38. (Original) The device in accordance with claim 25, further comprising an evaluating device structured and arranged to evaluated measurements from said measuring device.

39. (Original) The device in accordance with claim 38, further comprising an ejection device structured and arranged to eject the bar-shaped articles that is coupled to said evaluating device.

40. (Currently amended) An apparatus comprising:
a conveyor for conveying bar-shaped articles of the tobacco processing industry in a lengthwise axial manner; and

a measuring device coupled to said conveyor to measure at least one geometric property a length and a diameter of the bar-shaped articles.

41. (Canceled).

42. (Currently amended) The apparatus in accordance with claim 41 40, wherein the length and the diameter are simultaneously measured.

43. (Original) The apparatus in accordance with claim 42, wherein said measuring device comprises a light source and an optical receiver, and the bar-shaped articles are conveyed through light emitted from said light source, and the measurement is based upon an amount of the light emitted from said light source that is blocked from said optical receiver by the bar-shaped articles.

44. (Original) The apparatus in accordance with claim 41 40, wherein a position of both ends of the bar-shaped articles are concurrently detected in order to measure the length of the bar-shaped articles.

45. (Original) The apparatus in accordance with claim 41 40, wherein two orthogonal diameters of the bar-shaped articles are concurrently detected in order to measure the diameter of the bar-shaped articles.

46. (Currently amended) A process for providing bar-shaped articles, comprising:

conveying the bar-shaped articles of the tobacco processing industry in a lengthwise axial manner; and

measuring at least ~~one geometric property~~ a length and a diameter of the bar-shaped articles.

47. (Canceled).

48. (Original) The process in accordance with claim 47 46, further comprising simultaneously measuring the length and the diameter.

49. (Original) The process in accordance with claim 48, wherein the bar-shaped articles are conveyed through light emitted from a light source, and the measurement is based upon an amount of the light emitted from the light source that is blocked from an optical receiver by the bar-shaped articles.

50. (Original) The process in accordance with claim 47 46, further comprising concurrently detecting a position of both ends of the bar-shaped articles in order to measure the length of the bar-shaped articles.

51. (Original) The process in accordance with claim 47 46, further comprising concurrently detecting two orthogonal diameters of the bar-shaped articles in order to measure the diameter of the bar-shaped articles.